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"Medical Education Highlights for Primary Health Care"

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Sexual Harassment and Medical Education

Medical schools should take measures to prevent sexual harassment as well as be responsive to sexual harassment incidents in their programs. As a first step, a system must be installed that continuously evaluates the educational environment and provides a system of both notification and response. Sexual harassment is both unethical and illegal under education discrimination laws. The Supreme Court ruled in 1998 and 1999 that schools may be held liable for the sexual harassment of their students.

A survey conducted by the Association of American Medical Colleges in 2003 found that two percent of medical students reported sexual mistreatment in the form of gender-based exclusion from training opportunities and unwanted sexual advances and offensive sexist comments from school personnel. Most commonly residents, clinical faculty, nurses, patients, and fellow students (in that order of frequency) reported these incidents.

There are concerns that incidents of sexual harassment do not only affect an individual student but also negatively impact on the learning environment. Over the past seven years, there has been little improvement in the prevalence rate of sexual mistreatment in medical schools. Even though incidents of sexual treatment are relatively common, complaints to authorities are still rare.

While half of residents who experienced sexual harassment reported the incident to family or friends, only 18 percent reported the event to a supervising physician. One study reported that 64.3 percent of female students reported sexual abuse during their third year compared to more than 21 percent of male medical students.

Tolerating sexual harassment during medical training may perpetuate sexism within the profession. In addition, the authors state it may produce a future generation of physicians that includes a significant number who treat both colleagues and patients with disrespect.

(Recupero PR, Heru AM, Price M, Alves J. "Sexual harassment in medical education: Liability and protection." Academic Medicine. 2004; 79:817-824.)

Tactical Tips for Improving Bedside Teaching

Bedside teaching can be frustrating, boring, or absolutely riveting. Focusing on the learner instead of on the teacher's eloquence in medicine will help make it a more positive experience for both. This author presents a detailed description of 12 teaching strategies that facilitate bedside clinical teaching.

Tip 1: Preparation is a key element to conducting effective rounds and increasing teacher comfort at the bedside.

Tip 2: Draw a road map of what you plan to achieve at the bedside for each encounter.

Tip 3: Orient the learners to your plans for the session and negotiate goals and objectives for the session. Tell the learners what is to be taught.

Tip 4: Introduce yourself and the team to the patient and emphasize the teaching nature of the encounter.

Tip 5: Role model desired physician-patient interaction.

Tip 6: Stepping out of the limelight and keen observation are necessary parts of learner-centered bedside teaching.

Tip 7: Challenge the learners' minds without humiliating augmented by gentle correction when necessary. Do the teaching.

Tip 8: Before leaving the bedside, tell the learners what they have been taught.

Tip 9: Leave time for questions, clarifications, assigning further readings, etc.

Tip 10: Find out what went well and what did not.

Tip 11: Think about the bedside encounter. Evaluate what went well, what went badly, and what you would do the next time.

Tip 12: Start your preparation for the next encounter with insights from your reflection phase.

(Ramani, S. "Twelve tips to improve bedside teaching." Medical Teacher. (2003) 25: 112–115. Abstract contributed by Daniel E. Shaw, Ph.D., associate professor of behavioral medicine, NSU-COM.)

Suicide: The Experience of Psychiatric Residents

A study was conducted with 197 psychiatry residents who responded to a survey concerned with the frequency with which they encountered a completed suicidal incident, how it impacted them personally/professionally, and who they turned to for help. Of these residents, 61 percent encountered such a critical incident during their training. Compared to other dimensions, residents indicated the incident had the greatest impact on their own emotional health and how they would assess patients in the future. For support, they most frequently relied on fellow residents first, then friends, and third on their supervisors. This research confirms that suicide is a frequently occurring high-stress event in the residencies of many psychiatrists in training. Recommendations included the availability of numerous support services, including psychotherapy, employee assistance programs, and immediate critical incident debriefing.

(Pilkinton P. and Etkin M. "Encountering suicide: The experience of psychiatric residents." Academic Psychiatry. 2003; 27:93-99. Abstract contributed by Daniel E. Shaw, Ph.D. associate professor of behavioral medicine, NSU-COM.)

D.O. Students in the 2004 Allopathic Residency Match

More than 25,000 applicants were in the 2004 National Resident Matching Program (NRMP). Of the 25,246 applicants, 1,559 were osteopathic physicians compared to 14,609 U.S. allopathic medical school seniors and 7,686 international medical school graduates. The number of NRMP applicants this year represented a 5.3 percent increase from 2003 figures.

(Source: National Residency Matching Program. Match Day 2004 Highlights.)

Dual Medical and M.B.A. Degree Students

By offering dual degrees, medical schools influence the career decisions of their students. Dual degrees provide new options for future physicians recognizing their changing roles in the health care system and within society. The offering of a program to acquire the M.B.A. is a response to the demand for individuals within the health care system who are physician executives. It is also the recognition of the legitimacy of the role and function of the physician executive. In 2004, the Association of American Medical Colleges listed 41 M.D./M.B.A. programs. At least one D.O./M.B.A. program exists for osteopathic medical students (Nova Southeastern University College of Osteopathic Medicine). This compares to only eight medical schools in the nation that offered the M.B.A. as a dual-degree option for medical schools in 1999.

To assess motivation and influence in electing the M.B.A. as a dual degree for students, six medical schools offering the option were surveyed. It was determined that the most influential factors in pursuing the dual degree were career options, opportunities for innovation, opportunity to make a difference in medicine, opportunities to lead in medicine, and a consistency with their career interests. Students who responded to the survey who were pursuing the dual degree had a higher expected mean income than those who did not enroll in a M.B.A. dual degree program (i.e., $167,986 for dual-degree students compared to $132,208 for those not enrolled in a dual-degree program five years after completing all training). Among the highest ranking job activities that dual-degree students preferred was medical director of a multi-specialty group, director of a major HMO, medical director of the largest insurance/managed care company in the region, and CEO of a biotechnology company.

(Sherrill WW. "M.D./M.B.A. students: An analysis of medical student career choices." http//www.med-ed-online.org/res00093.htm.)

Modeling Professionalism in Medical Education

Currently in medical education there is a profession-wide effort to teach and instill professional behaviors in medical school graduates and residents. Defining professionalism is a difficult task. Toward that end, the National Board of Medical Examiners compiled a list of professional behaviors to help illustrate the concept of professional behavior. The behaviors fall into the following general categories:

- Altruism
- Honor and Integrity
- Caring, Compassion, and Communication
- Respect
- Responsibility
- Accountability
- Excellence and Scholarship
- Leadership
- Knowledge of Skills Related to Professionalism

The author proposes that medical educators can contribute to this effort and simultaneously improve teaching by applying the behaviors of professionalism to teaching repertoire.

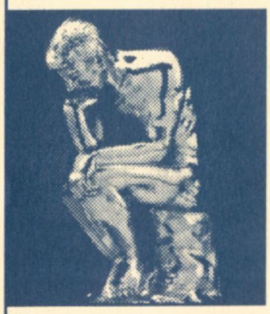
(National Board of Medical Examiners. "Behaviors of professionalism." http://ci.nbme.org. Accessed 5/1/04. Abstract contributed by Daniel E. Shaw, Ph.D., associate professor of behavioral medicine, NSU-COM.)

Special Supplement

Department of Educational Development

Stanley Cohen, Ed.D.
Vice Provost, Health Professions Division

Incorporating Critical Thinking Techniques in the Classroom Setting



Teaching critical thinking skills has become of prime importance because of the demands of our technical world and the gigantic change in information, especially in the science of medicine. Chances are that content students learned several years ago may be incorrect today.

So the ability to do lifelong learning requires not only an interest, not only a desire, not only curiosity, but also some very specific critical thinking skills. Hundreds of research studies have been focusing on the following questions: "Can critical thinking be taught?" "What is the best way to do it?" "If one learns critical thinking in a psychology or sociology course, do the skills transfer to medicine?"

In fact, almost all of these studies indicate there is no one best way to teach these skills in medical education. They do recommend it to be part of regular courses, not a separate course. Medical students can learn to do reflective thinking, and in the face of many choices, they can make appropriate conclusions. A summary of research studies from Cotton[1] supports this conclusion.

Where do we start? We have to assume, based on Norris's research in 1985[2], that most students do not score well on tests that "measure ability to recognize assumptions, evaluate arguments, and appraise inference." So most of our students do not exhibit high levels of critical thinking skills even though their cognitive content levels may be quite high.

In order to get a transfer of learning, we need to teach students how to do critical thinking in the classroom before they leave our classes. Some ways of doing this are documented below.

1. When lecturing in a content area, give supporting evidence you have used to make certain conclusions.
2. When students introduce their ideas, insist on what evidence they have.
3. Have students defend the reliability of their sources and their conclusions.
4. Share with students your personal stories about when you needed to change your views because you heard new evidence.
5. Analyze medical case studies with students, allowing them plenty of wait time to perceive the patient, look for reasons for illness, see alternatives for treatments and, after their initial differential diagnosis, change their opinion based on evidence that other students have raised.
6. Share with students how you do your own metacognition by assessing and monitoring your old knowledge, your new knowledge, and how your treatment plans have changed.
7. When planning content, try to include several higher-order questions in your classes that challenge students to probe for information in order to answer the questions. Questions that require putting together several difficult concepts in order to make applications

Effective with the September 2004 issue of the *Medical Education Digest*, the Health Professions Division's Department of Educational Development will provide a special supplement in each subsequent edition.

Attracting Students to Primary Care Careers

The decreased interest in primary care is attributed to lower remuneration than subspecialists, an increase in educational debt, and frustrations about the hassles of medical practice. There is a call to redesign residency programs in primary care that emphasize interdisciplinary, ambulatory, home-based, and inpatient care for a population that is aging and has complex chronic health problems. While hospitalists now provide inpatient care and relieve physicians of the responsibilities for continuous patient care, continuity of care and the cherished physician-patient relationship is disrupted. The authors emphasize that the massive educational debt that students compile makes primary care and nonprocedural-oriented specialties unaffordable, even for some students who aspire to primary care practice.

In addition, compared to students 20 and 30 years ago, many are now concerned about discretionary time and having a balance between their personal and professional lives. They want careers that will provide more time for themselves and their families. The article concludes that the health care delivery system needs to be changed to attract more students to generalist careers. Clerkships and residencies need to be changed so they are high quality, efficient, and interdisciplinary. The inequity in reimbursement in favor of procedure-related skills over patient-focused skills needs to be reduced. Finally, escalating student debt and the cost of malpractice insurance must be dealt with in a proactive manner.

(Fincher RE. "The road less traveled: Attracting students to primary care." New England Journal of Medicine. 2004; 351: 630-632.)

Medical School Attitudes Toward IRBs

Institutions, industry, and government sponsors of medical research require that there is integrity in institutional review board (IRB) assessments. The authors believe the accreditation process begun by the Association for the Accreditation of Human Research Protection Programs and the National Committee for Quality Assurance should help establish standards for the IRB review process. However, medical schools are still not convinced that a central IRB is a credible alternative to a local, university-based IRB. Researchers working at the Division of Biomedical and Health Sciences Research of the Association of American Medical Colleges who surveyed the 125 allopathic U.S. medical schools made this determination.

Of those responding, 76 percent never had used a central IRB. In fact, most schools had no interest in using a central IRB. They thought their local IRB worked efficiently and were concerned about issues of institutional liability and about the loss of local representation in the review process. In addition, they did not believe a central IRB would help them acquire industry-sponsored research. Most schools that had used a central IRB, however, indicated they would continue to do so in the future.

(Loh ED and Meyer RE. "Medical schools' attitudes and perceptions regarding the use of central institutional review boards." Academic Medicine. 2004: 79: 644-651.)

NSU NOVA SOUTHEASTERN UNIVERSITY

Health Professions Division
College of Osteopathic Medicine
3200 South University Drive
4th Floor, Room 1495
(954) 262-1469
Fort Lauderdale, FL 33328-2018
http://medicine.nova.edu

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Editor
Leonard Levy, D.P.M., M.P.H.
Associate Dean

Graphic Designer
Scott Colton, Director
Education Communications

Contributing Editor
Daniel Shaw, Ph.D.

take more time than simple knowledge of fact or comprehension. After posing a higher-level question, extend your wait time. Research shows that after 25-30 seconds, hands will fly up with student responses. This methodology will also get students much more actively involved in the instructional design, which is a critical positive factor in learning outcomes.

8. If you feel uncomfortable with this teaching strategy, there are computer-training programs designed for teachers to enhance their problem-solving skills.

There are those who argue that because of the amount of time needed to teach critical thinking, it is impossible to "cover the book's content" in a one- or two-hour lecture. Cognitive material can be learned from reading texts and from computer-assisted instruction. Lecture alone will probably never be enough to learn all cognitive material.

In the final analysis, teacher behavior can make a huge difference in teaching critical medical thinking skills. According to Jerry Thacker, cited by Gough[3], the learning environment established by the teacher sets the stage and should include the following:

- setting boundaries and ground rules in advance
- planning a variety of methodologies
- respecting every student
- being flexible
- having a positive attitude
- modeling your critical thinking skills
- rewarding students who get involved

1. Cotton, K. (1991) Teaching Thinking Skills. *School Improvement Research Studies.* NW Regional Educational Laboratory, 1-22.

2. Norris, S.P. (1985) Synthesis of Research on Critical Thinking. *Educational Leadership* 42/8, 40-45.

3. Gough, D. (1991) *Thinking About Thinking.* Alexandria, VA: National Association of Elementary School Principals (ED 327 980).

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